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EXAMINER	
DINH, DUC Q	

ART UNIT	PAPER NUMBER
2674	

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/632,196	SCHNEIDER, GERHARD A.	
	Examiner	Art Unit	
	DUC Q. DINH	2674	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 October 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18,21-30,38-42,47-53 and 55-59* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18,21-30,38-42,47-53 and 55-59* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This is response to the Amendment filed on October 31, 2005. Claims 1-18, 21-30, 38-42, 47-53, and 55-59 are pending in the application.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention

2. Claims 58-59 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 58 recites the limitation " the set of buttons are configured for substantially simultaneously operation with the electronic control device".

Although the specification as originally filed discloses, specifically, in Fig. 3a a selection switch 335 to toggle between operation of the laser pointer, the pointing device or a combination of a laser pointer and a pointing device (page 20, lines 5-7, page 21, lines 17-21). There is no support the quoted limitation above.

The examiner examines the application as best understanding of the claimed languages.

Claim Objections

2. Claims 1, and 49 are objected to because of the following informalities: Claim 1, line 14, 16, claim 49 line 4, "electrical contract" should read "electrical contact". Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-5, 9-10, 16-17, 26-28, 49-53 and 55-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Daniels (U. P. Patent No. 6,417,840 B1) in view of Stork et al. (U. S. Patent No. 6,275,174), hereinafter Stork 174' and further in view of Kim (U.S Patent No. 6,545,664).

In reference to claim 1, Daniels discloses a presentation device (integrated cordless mouse in Fig. 11) comprising: an electronic control device (41) configured to communicatively coupled to a computer system to provide a control mechanism for the computer system; a radio frequency transmitter configured to communicatively coupled to the electronic control device with the computer system (col. 3, line 35-45); a coherent light source configured to provide a coherent light beam for pointing the coherent light beam on and object (laser generator 42) ; a user operable switch (30 Fig. 11) a switch 30, having first state to select the operation of the

mouse in a first state or the laser generator in the second state when at least one of the mouse or the laser is operable.

Accordingly, Daniels discloses everything except the limitation a third state configured to select operation of the control device and the light source for combined operation of the electronic device and the light source. Stork 174' discloses an input device in Fig. 2a and 2b, the region of the body of rotation not cover by the holding hand has in addition to the first embodiment a field with 3 keys (Function 5,6,7), with can operated by the free hand. In order to call up less frequently required special functions, Furthermore, a switch L is provided in this embodiment (col. 5, lines 60-66) for actuating the laser pointer. This implies that additional switch L can be used to combine the operation of the laser pointer with others functions according to the rotating knob (see col. 4, line 45 – col. 5, line 15).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify the switch in the device of Daniels to combine the control operation of light source and the electronic device as taught by Stork 174' because it would provide additional enhanced cursor control for the computer system with the laser pointer.

Daniels discloses the batteries in *the compartment 28 may be commonly dedicated to power both of the laser pointer and the electronic control when the device is used as one unit, i.e. providing a single power source configured to share by the electronic control device and the coherent light source.* However, the combination of Daniels and Stork 174' do not teach the device comprising a first housing portion including the electronic control device and a first electronic contract for the first power source; and a second housing portion including the coherent light source, a second power source and a second contract for the second power source;

wherein the first housing and the second housing portion are separable and combinable, if the first housing and the second housing are combined, the first and second electrical contacts are contract and the first and second power sources are configured to provide a single power source configured to shared by the electronic control device and the coherent light source. Kim discloses a presentation device in Fig. 4 having a first housing portion (26) including the electronic control device and a first electronic contact for the first power source; and a second housing portion including the coherent light source (64), a second power source and a second contact (80) for the second power source; wherein the first housing and the second housing portion are separable and combinable, if the first housing and the second housing are combined, the first and second electrical contacts are contract and the first and second power sources are configured to provide a single power source configured to shared by the electronic control device and the coherent light source (Fig. 4, lines 55-65).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify housing of the combination of Daniels and Stork' 174 to be separable and combinable as taught by Kim because it would provide users a convenience replaceable representation device to perform multiple tasks, i.e.: cursor pointer in head operated mode or laser pointer in hand operated mode for enhancing control of computer devices (col. 1, lines 55-67)

In reference to claim 56, Daniels discloses the control device is a touch pad in Fig. 8-9 as claimed.

In reference claims 57-59, Daniels discloses the switches 114, 116 and 12 in Fig.6 as claimed.

In reference to claim 16, see the rejection of claims 1. In addition, Kim discloses a releasable couple the first representation module with the second representation module to form a unitary article (Fig. 4).

In reference to claim 17, refer to rejection for the laser pointer as in claim 1.

In reference to claims 26-28, Daniels discloses in FIGS. 3, 4, a switch 30 is provided on a side 22 of the cordless mouse 10. While the switch 30 is shown to be on the side 22 to the left of the front surface 20, it is to be understood that the switch may be located anywhere on the mouse 10. The switch 30 functions to selectively allow transmission of the computer control signals produced by either of the buttons 14, 16 and/or the mouse ball 26 or transmission of the beam of light from the light generating apparatus 27 through the port 24. Specifically, with the switch 30 in its normal, under pressed state, the mouse 10 functions as a conventional cordless computer mouse and the signal generator 41 is enabled to transmit signals from the mouse ball 26 and the operating buttons 14, 16 to the computer. Upon depression of the switch 30, the signal generator 41 is disabled. Instead, the laser generator 42 is enabled and a beam of light from the laser generator 42, is transmitted through the port 24. FIG. 11 shows the electrical connection of the switch 30 to enable (EN) inputs of the signal generator 41 and the laser generator 42. As shown, the switch 30 selectively applies an enable signal to one or the other generators 41, 42 in accordance with whether it is depressed or not. Alternatively, as illustrated in FIGS. 10A and 10B, a switch 30' may be a toggle switch. Namely, the switch 30' may be pushed and then mechanically held into an A position, which enables the signal generator 41 or

into a B position which enables the laser generator 42 (col. 3, line 67 - col. 4 line 19). In addition, Stork 174' discloses separate switch L for the laser light source.

In reference to claim 55, Daniels discloses pointing device is a mouse

In reference to claims 2-5, 9-10, the combination of Daniels Stork 174' and Kim discloses everything except for the location and/or arrangement of the control mechanism a light beam on the device housing.

Absent a showing of critically and/or unexpected result, it would been obvious to one of ordinary skill in the art to relocate the arrangement of the control mechanism and the light beam on the device housing as desired as was judicially recognized with IN RE JAPIKEE USPQ 70 (CCPA 1950), which recognizes that the relocation of well known element is normally not desired toward patentable subject matter.

5. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Daniels (U. P. Patent No. 6,417,840 B1) in view of Stork et al. (U. S. Patent No. 6,275,174), hereinafter Stork 174' in view of Kim (U.S Patent No. 6,545,664) and as applied to claims 1-5, 9-10, 16-17, 26-28, 49-53 and 55-59 above and further in view of Liu (. 6133,907).

In reference to claims 6-7, refer to the rejection as applied to claims 2-5 above. Accordingly, the combination of Daniels, Stork 174' and Kim discloses everything except a lens for the coherent light source. Liu discloses a pointing device employing a laser beam having a lens (16; Fig. 2) as claimed.

It would have been obvious for one of ordinary skill in the art at the time of the invention to provide a lens in the combination of Daniels, Stork 174' and Kim as taught by Liu because it would provide a protecting means protecting the light source of the coherent light

6. Claims 8, 11-15, 18 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daniels in view of Stork 174' and Kim as applied to claims 1-5, 9-10, 16-17, 26-28, 49-53 and 55-59 as above, and further in view of Stork et al (U. P. Patent No. 6,181,329 B1), hereinafter Stork 329'.

In reference to claims 8, 11-13, Daniel and Stork 174' fail to discloses a writing mechanism and gyroscope system for the electrical control device. Stork 329' discloses an apparatus for tracking the location of a writing instrument comprises and three gyroscopes 126-128.

It would have been obvious for one of ordinary skill in the art for providing the Stork's 329' writing instrument to the device discloses by Daniels and Stork 174' and Kim for providing a convenient writing means for users using the input device.

It would have been also obvious for one of ordinary skill in the art at to provide the gyroscope system taught by Stork 329' in the device of Daniel and Stork 174' and Kim for sensing the position information of the device for the system.

In reference to claims 14-15, Daniels and Stork 174' discloses everything except for the location and/or arrangement of the control mechanism, the writing instrument and light beam source on the device housing.

Absent a showing of critically and/or unexpected result, it would been obvious to one of ordinary skill in the art to relocate the arrangement of the control mechanism an light beam on the device housing as desired as was judicially recognized with IN RE JAPIKEE USPQ 70 (CCPA 1950), which recognizes that the relocation of well known element is normally not desired toward patentable subject matter.

In reference to claim 21, the combination of Daniel and Stork 174' and Kim fails to disclose radio-frequency receiver for the system. Stork 392' discloses a transceiver 140 for transmitting data from tracking sensor and other data to the remote computing device 175. Transceiver 140 may also receive data from remote computing device 175 (See Fig. 1).

It would have been obvious for one of ordinary skill in the art at the time of the invention was made to substitute the transceiver taught by Stork 329' with the transmitter disclosed by Daniels for providing two way communication for the system, i.e.:, transmitting data from the input device to the remote computer and for receiving data from remote computing system (col. 3, lines 30-37).

7. Claims 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daniels in view of Stork 174' and Kim as applied to claims 1-5, 9-10, 16-17, 26-28, 49-53 and 55-59 and further in view of Hu (U. P. Patent No. 5,952,997).

In reference to claim 22, the combination Daniels and Stork 174' discloses everything except the electronic control comprises an optical pointing device. Hu discloses an optical mouse as optical pointing device as claimed.

It would have been obvious for one of ordinary skill in the art to substitute the optical mouse taught by Hu for the conventional mouse of Daniels and Stork 174' to provide other optional input device as user's desire.

In reference to claims 23-25, Daniels discloses switch 30 to select between the mouse mode (for slide show control) and laser pointer mode (optical pointing device mode) [col.4, line 63-col.5, line 3] and configured to switch between the first and second states to supply power to the mouse or laser pointer as claimed.

8. Claims 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daniels in view of Stork 174' and Kim as applied to claims 1-5, 9-10, 16-17, 26-28, 49-53 and 55-59, and further in view of Buchner et al. (U. S. Patent No. 5,532,753), hereinafter Buchner.

In reference to claims 29-30, the combination of Daniels and Stork 174' Kim fail to disclose the power management unit to turn off at least one electronic device and the coherent light source in response to a predetermined time. Buchner disclose an input device 3 in Fig. 1 having operation member 3a, If the operation member 3a is released, the control picture disappears and the remote controller 3 is automatically switched from the operation mode to the power off or power save mode in a predetermined time after the operation member 3a is released (col. 5, lines 63-67).

It would have been obvious for one of ordinary skill in the art at the time of the invention was made to provide the teaching of Buchner in the device of Daniels and Stork 174', i.e.: turn of the power of the input device after the operation member is released in a predetermined of time, for saving power of the input device.

9. Claims 38-42 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daniels (U. S. Patent No. 6,417,840) in view of Kim (U.S Patent No. 6,545,664).

In reference to claims 38-39, Daniels discloses an integrated cordless mouse in Fig. 11 comprising: communication means (col. 3, lines 35-51); a signal generator 41 (application control means) and laser generator (coherent light source); housing means (Fig. 1-5) for housing the communication means, the application means and coherent light means which selectively communicates with a computer and which is also capable of transmitting a beam of laser light. In addition, Daniels discloses that the signals transmitted by a cordless mouse 10 to the computer are of necessity signals, which may be sent without a physical transmission line, the signals from the signal generator 41 may be transmitted as radio frequency signals satisfying to the claimed limitation communication means (col. 3, line 35-45). As shown in Fig. 11, a switch 30 corresponding to the switching means, having first state to select the operation of the mouse in a first state or the laser generator in the second state (col. 3, line 65 – col.4, line 25).

Daniels discloses the batteries in *the battery compartment 28 may be commonly dedicated to power both of the laser pointer and the electronic control when the device is used as one unit, i.e. providing a single power source configured to share by the electronic control device and the coherent light source.* However, Daniels does not teach the housing configured to be separable into a first portion that includes a coherent light source means and s second portion including the

application control means; the first portion includes first electronic contact and a first power source; and a second portion includes the a second power source and a second electrical contact for the second power source; if the first housing and the second housing are combined, the first and second electrical contacts are contract and the first and second power sources are configured to provide a single power source configured to shared by the electronic control device and the coherent light source. Kim discloses a presentation device in Fig. 4 having a first housing portion (26) including the electronic control device and a first electronic contact for the first power source; and a second housing portion including the coherent light source (64), a second power source and a second contact (80) for the second power source; wherein the first housing and the second housing portion are separable and combinable, if the first housing and the second housing are combined, the first and second electrical contacts are contract and the first and second power sources are configured to provide a single power source configured to shared by the electronic control device and the coherent light source (Fig. 4, lines 55-65).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify housing of the combination of Daniels to be separable and combinable because it would provide users a convenience replaceable representation device to perform multiple tasks, i.e.: cursor pointer in head operated mode or laser pointer in hand operated mode for enhancing control of computer devices (col. 1, lines 55-67)

In reference claim 40, Daniels discloses the mouse is operated to switch between display images (col. 47-50).

In reference to claims 41-42, Daniels discloses the communication device may also be a mouse or a trackball as claimed (col. 4, lines 26-38).

In reference to claim 48, Daniels discloses switch 30 to select between the mouse mode (for slide show control) and laser pointer mode (optical pointing device mode) for the computer system as claimed [col.4, line 63-col.5, line 3].

10. Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over by Daniels (U. P. Patent No. 6,417,840 B1) in view of Kim (U.S Patent No. 6,545,664) as applied to claims 38-42 and 48 and further in view of Liu (. 6133,907).

In reference to claim 47, the combination of Daniels and Kim discloses everything except a lens for the coherent light source. Liu discloses a pointing device employing a laser beam having a lens (16; Fig. 2) as claimed.

It would have been obvious for one of ordinary skill in the art at the time of the invention to provide a lens in the combination of Daniels and Kim as taught by Liu because it would provide a protecting means protecting the light source of the coherent light.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. Claims 49-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daniels 6,417,940).

In reference to claim 49, Daniels discloses a universal presentation device (29; Fig. 11), a method comprising a steps of:

combining a first portion (41) of the device (29) with a second portion (42) of the device to contact a first electrical contact (83) in the first portion (41) to a second electrical contact (85) in the second portion (42);

in response to contacting the first electrical contact and the second electrical contact, coupling the first power source (82) in the first portion (41) to a second power source (81) in the second portion;

switching a switch (30) to operate the coherent light source, the electrical control device;

communicating with a computer system; (col. 4, lines 50-55);

receiving user input via the electronic control device (col. 4, line 50-55);

controlling the computer system in response to the user input (col. 4, lines 55-60); and

providing the coherent light source for generating a light beam to reflect off an object; (col. 4, lines 50-66);

Accordingly, Daniels in this embodiment discloses everything except in response to contacting the first electrical contact and the second electrical contact, coupling the first power source (82) in the first portion (41) to a second power source (81) in the second portion providing a single power source to power a coherent light source in the first portion and an electronic control device in the second portion; However, in the alternative embodiment, Daniels discloses the batteries in the compartment 28 (Fig. 5) maybe commonly dedicated to power both forms of signal transmission, i.e.: a single power source to power the light source and the mouse.

It would have been obvious for one of ordinary skill in the art at the time of the invention to recognize the combination of batteries, i.e.: power source connections, for different devices housing within a case is practical and well known as an alternative way to power the combined system as taught by Daniels (col. 2, lines 50-53).

In reference to claim 50, Daniels discloses the radio-frequency transmission for communicating between the host system and the device (col. 3, lines 35-45).

In reference to claims 51-53 , Daniels discloses the step of selecting between the controlling the host system and the light source (col. 4, line 48 – col. 5, line 3).

Response to Arguments

13. Applicant's arguments with respect to claims 1-18, 21-30, 38-42, 47-53, and 55-59 have been considered but are moot in view of the new ground(s) of rejection. As discussed above, Daniels discloses the batteries in *the compartment 28 may be commonly dedicated to power both of the laser pointer and the electronic control when the device is used as one unit, i.e. providing a single power source configured to share by the electronic control device and the coherent light source.* Furthermore, Kim discloses a module presentation device configured to be separable and combinable and when the device is combinable a first electrical contact of and a second electrical contact of the first and second module are contract to provide a single power source to be shared by both of the modules. The rejection is maintained.

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **DUC Q. DINH** whose telephone number is **(571) 272-7686** The examiner can normally be reached on Mon-Fri from 8:00.AM-4:00.PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Edouard Patrick** can be reached on **(571)272-7603**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

(703) 872-9306 (for Technology Center 2600 only)

Hand-delivery response should be brought to: Crystal Park II, 2121 Crystal Drive, Arlington, Va Sixth Floor (Receptionist)

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 305-4700.

DUC Q DINH
Examiner
Art Unit 2674

PATRICK N. EDOUARD
SUPERVISORY PATENT EXAMINER

DQD
January 23, 2006